

**State Water Resources Control Board**  
Division of Drinking Water

February 17, 2017

Mr. Thomas Esqueda, Director  
City of Fresno - Department of Public Utilities  
2600 Fresno Street, Room 4019  
Fresno, CA 93721

Dear Mr. Esqueda,

**RE: USEPA Lead and Copper Rule Review of the City of Fresno's Public Water System - Recommendations**

The purpose of this letter is to address recommendations that were included in a report issued by the United States Environmental Protection Agency – Region IX related to their review of the City of Fresno's (City) Lead and Copper Rule (LCR) compliance information. Specifically, the USEPA – Region IX issued a letter to Tom Howard, Division of Drinking Water's Executive Director, on January 19, 2017, and included a copy of the report that summarized the findings and recommendations resulting from an exhaustive review of the City's LCR compliance information. The report contained five recommendations that the Division plans to implement. As such, the Division recommends that the City of Fresno do the following in accordance with the recommendations contained in the USEPA Report, enclosed:

1. **Revise the lead and copper tap sampling strategy to identify more representative samples of water quality in the distribution system and submit to the Division by March 19, 2017.** Specifically, the lead and copper tap sampling strategy should include schedules that are representative of periods when the surface water supply is in use and represents normal operating practice for the surface water supply. The City should consider distribution system operational water quality data, initial water quality parameter data, and knowledge of the distribution system hydraulics to identify areas predominantly served by the principal water sources in addition to mixing zones and identify sample sites within the areas mentioned above that meet the site selection criteria established in the LCR. If there are no such sites within those areas, the City should request EPA approval for any sample sites that are representative of the plumbing material used in those areas, but are not in conformance with the LCR.
2. **The City should return to initial lead and copper tap monitoring frequency.** Specifically, the City should return to the initial lead and copper tap monitoring frequency including two standard rounds of monitoring conducted six months apart. The monitoring should be scheduled such that the first 6-month monitoring period will end on, or before,

June 30, 2017. Any time the City implements a long-term corrosion control treatment (CCT) change or adds a new source of substantially different quality, such as another surface water treatment plant, the City should return to initial monitoring to confirm that the CCT is optimized. Upon completion of the two rounds of 6-month monitoring, the City may request to reduce monitoring provided the 90<sup>th</sup> percentile values for lead and copper are below the action levels.

3. **The City should conduct initial water quality parameter (WQP) monitoring at entry points and within the distribution system.** The WQP monitoring at the entry points to the distribution system will include the entry point from each of the existing surface water treatment plants as well as all of the City's active groundwater wells. Initial WQP monitoring should consist of two samples for pH, alkalinity, orthophosphate (when an inhibitor containing a phosphate compound is used), calcium, conductivity, and water temperature at each entry point as well as at 25 tap monitoring sites during each of the initial two 6-month monitoring periods.

After the initial WQP monitoring is completed, ongoing WQP monitoring should consist of monitoring at each entry point for pH, alkalinity dosage and concentration (if alkalinity is adjusted as part of CCT), and phosphate dosage and concentration (if a corrosion inhibitor containing phosphate is used as part of CCT) a minimum of once every two weeks. Ongoing WQP monitoring at the tap monitoring locations should consist of two samples for pH, alkalinity, orthophosphate, and calcium at the reduced number of tap locations (10 locations) at least every 6 months.

The City should ensure that all entry point sample locations are representative of each source after treatment and ensure that all distribution system sample locations are representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods and seasonal variability. The distribution system sample locations can be from sites other than customers' taps, such as bacteriological sample sites.

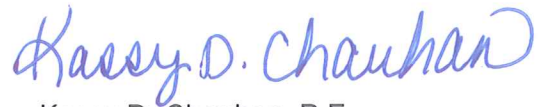
4. **The Division of Drinking Water will be establishing water quality parameters for the Northeast Surface Water Treatment Plant.** To ensure that continuous optimized corrosion control treatment is being provided, the Division will establish water quality parameters for the NESWTP as well as any other entry point to the distribution system that requires corrosion control. The water quality parameters will be established by permit provision and be included in the operations plan for the NESWTP.
5. **The City will be required to initiate corrosion control requirements if the System fails to be deemed optimized for corrosion control.** If the City is not deemed to be optimized for corrosion control following the two 6-month periods for lead and copper tap monitoring as described in Recommendation No. 1, the Division will require the City to conduct a corrosion control study or submit information to the Division to make a determination that the City's corrosion control treatment is optimized.

**Please provide a written response to this letter by February 28, 2017, indicating your willingness to comply with the recommendations contained in Items 1, 2, 3 and 5.** The assistance provided during the Lead and Copper file review is greatly appreciated.

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If you require any further information or need assistance, please contact me at (559) 447-3316.

Sincerely,



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Senior Sanitary Engineer  
Merced District  
Central California Section  
SOUTHERN CALIFORNIA BRANCH  
DRINKING WATER FIELD OPERATIONS

cc: Carl L. Carlucci, P.E. – Division of Drinking Water  
Kurt Souza, P.E. – Division of Drinking Water  
Darrin Polhemus, P.E. – Division of Drinking Water  
Luis Garcia-Bakarich – USEPA – Region IX  
Mr. Wayne Fox - Fresno County Environmental Health Department